Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An optical data transmission system, comprising:

a hub;

a passive kerb location having an optical router and a plurality of optically pumped sources; and

a plurality of optical network units each corresponding to one of the plurality of optically pumped sources, wherein each optical network unit has a laser for producing data modulated pumping light for transmission to its respective optically pumped source,

wherein each optically pumped source is configured to receive injection light from an injection source outside the passive kerb location and to receive the data modulated pumping light from its respective optical network unit, wherein the optically pumped source is configured to form data modulated transmission light at a predefined wavelength range assigned to its respective optical network unit, wherein the data modulated transmission light is based on the injection light and the data modulated pumping light, and wherein each predefined wavelength range corresponds to a distinct wavelength channel,

wherein the optical router is configured to route wavelength channels to the hub, and

wherein the data modulated pumping light is passively converted into the distinct wavelength channels without any intermediate conversion to or from an electrical signal, and wherein the passive kerb location does not require a supply of electricity to form the data modulated transmission light.

2. - 3. (Cancelled)

4. (Previously Presented) An optical data transmission system according to claim 1, wherein the data modulated pumping light is within a wavelength range which does not include the wavelength or wavelengths of the wavelength channels.

5. – 7. (Cancelled).

8. (Previously Presented) An optical data transmission system according to claim 1, wherein respective ones of the optical network units are sufficiently similar so that they are interchangeable.

9. (Previously Presented) An optical data transmission system according to claim 1, wherein the optically pumped sources are injection locked lasers configured to receive injection light, and wherein the injection source of the injection light is upstream from the passive kerb location.

10. (Previously Presented) An optical data transmission system according to claim 9, wherein an injection wavelength is selected by at least one of a wavelength division multiplexer or an arrayed waveguide grating.

11. (Previously Presented) An optical data transmission system according to claim 1, wherein the optically pumped sources comprise external cavity lasers.

12. (Previously Presented) An optical data transmission system according to claim 11, wherein the optical router is within a laser cavity of at least one optically pumped source.

13. (Currently Amended) An optical data transmission system according to claim 1, wherein the data modulated pumping light is at a wavelength different from the wavelength of light used to carry data traffic in upstream from the passive kerb location and downstream from the hub.

14. (Previously Presented) An optical data transmission system according to claim 1, wherein the optical router comprises a wavelength division multiplexer.

15. (Previously Presented) An optical data transmission system according to claim 1, wherein the optical router comprises an arrayed wavelength grating.

16. (Currently Amended) A method of optically transmitting data, the method comprising:

receiving data modulated pumping light from a plurality of optical network units and receiving injection light from an injection source at a passive kerb location in an optical data transmission system, wherein the passive kerb location comprises a plurality of optically pumped sources each assigned to a respective optical network unit, wherein each optically pumped source includes a laser cavity configured to select a distinct resonance peak of an incident light, and wherein the optically pumped sources are configured to form data modulated transmission light based on the injection light and the data modulated pumping light;

passively converting the data modulated pumping light from each optical network unit into data modulated transmission light based on the injection light and the data modulated pumping light, wherein each optical network unit is assigned a distinct predefined wavelength range for its data modulated transmission light corresponding to a distinct wavelength channel, [[and]] wherein said converting is performed without an intermediate conversion to or from an electrical signal, and wherein a supply of electricity to convert the data modulated pumping light is not required at the passive kerb location; and

routing the wavelength channels each having distinct predefined wavelength ranges assigned to respective optical network units for transmission to a hub with a passive optical router.

17. – 18. (Cancelled).

19. (Currently Amended) An optical data transmission system, comprising:

receiving means for receiving data modulated transmission light at a passive kerb location from a plurality of optical network units, wherein the passive kerb location comprises a plurality of optically pumped sources each assigned to a respective optical network unit, wherein each optically pumped source includes a laser cavity configured to select a distinct resonance peak of an incident light, and wherein the optically pumped sources are configured to form data modulated transmission light based on the injection light and the data modulated pumping light;

converting means for passively converting the data modulated transmission light from each optical network unit into data modulated transmission light based on the injection light

and the data modulated pumping light, wherein each optical network unit is assigned a predefined wavelength range for its data modulation transmission light corresponding to a distinct wavelength channel, [[and]] wherein the converting means does not convert the data modulated transmission light to or from an electrical signal, and wherein the converting means does not require a supply of electricity to convert the data modulated transmission light; and

routing means for routing the wavelength channels having predefined wavelength ranges assigned to respective optical network units for transmission to a hub with an optical router.

20. (Previously Presented) The optical data transmission system according to claim 1, wherein the optically pumped sources each comprise:

a laser cavity;

one or more mirrors defining the cavity; and

wavelength selective elements inside the cavity.

21. (Currently Amended) The method of transmitting data according to claim 16, further comprising optically pumping, at the passive kerb location, the plurality of optically pumped sources with the plurality of respective data modulated pumping light.

22. (Cancelled)

23. (Previously Presented) The method of transmitting data according to claim 16, wherein the data modulated pumping light is within a wavelength range which does not include the wavelength or wavelengths of the wavelength channels.

24. – 29. (Cancelled)

30. (Currently Amended) The optical data transmission system according to claim 19, further comprising pumping means for optically pumping the plurality of optically pumped sources at the passive kerb location.

31. (Cancelled)

32. (Previously Presented) The optical data transmission system according to claim 19, wherein the optical signals are within a wavelength range which does not include the wavelength or wavelengths of the wavelength channels.

33. (Previously Presented) An optical data transmission system according to claim 9, wherein the injection light is amplified spontaneous emission noise produced by an upstream preamplifier.

34. (Previously Presented) An optical data transmission system according to claim 11, wherein the external cavity lasers are formed from narrow band reflectors.

35. (Currently Amended) A method of optically routing optical data at a passive kerb location from a first optical network unit and a second optical network unit to a hub, the method comprising:

receiving a first data modulated pumping light from the first optical network unit and a second data modulated pumping light from the second optical network unit, wherein the first and second data modulated pumping lights have wavelengths within a first wavelength range, wherein the first optical network unit is assigned to a first optically pumped source at the passive kerb location, and wherein the second optical network unit is assigned to a second optically pumped source at the passive kerb location;

routing the received first data modulated pumping light via a first upstream/downstream wavelength division multiplexer to the first optically pumped source and the received second data modulated pumping light via a second upstream/downstream wavelength division multiplexer to the second optically pumped source;

converting the received first data modulated pumping light at the first optically pumped source to a first data modulated transmission light having a first wavelength;

converting the received second data modulated pumping light at the second optically pumped source to a second data modulated transmission light having a second wavelength;

routing the first data modulated transmission light from the first data modulated pumping source to a multiplexing element via the first upstream/downstream wavelength division multiplexer;

routing the second data modulated transmission light from the second data modulated pumping source to the multiplexing element via the second upstream/downstream wavelength division multiplexer, wherein the first and the second wavelengths are predetermined and are distinct from one another;

multiplexing the first data modulated transmission light and the second data modulated transmission light;

transmitting the multiplexed first data modulated transmission light and second data modulated transmission light to the hub;

receiving an injection light at the upstream side of the passive kerb location;

splitting the injection light into injection light having the first wavelength and the second wavelength; and

routing the injection light having the first wavelength to the first optically pumped source via the first upstream/downstream wavelength division multiplexer and the injection light having the second wavelength to a second optically pumped source via the second upstream/downstream wavelength division multiplexer.

36. (Previously Presented) The method of optically routing data at a passive kerb location according to claim 35, wherein the multiplexing element comprises at least one of a wavelength division multiplexer or an arrayed waveguide grating.

37. (Cancelled)

38. (Previously Presented) The method of optically routing data at a passive kerb location according to claim 35, wherein the first and second optically pumped sources comprise injection locked lasers configured to receive injection light.

39. (Previously Presented) The method of optically routing data at a passive kerb location according to claim 35, wherein the injection light is broadband light.

40. (Previously Presented) The method of optically routing data at a passive kerb location according to claim 35, wherein the injection light is amplified spontaneous emission noise produced by an upstream preamplifier.

41. (Previously Presented) The method of optically routing data at a passive kerb location according to claim 35, wherein the first and second optically pumped sources comprise external cavity lasers, wherein the external cavity lasers are formed from narrow band reflectors.

42. (Previously Presented) The method of optically routing data at a passive kerb location according to claim 35, wherein the first and second optically pumped sources, the first and second upstream/downstream wavelength multiplexers, and the multiplexing element are contained within a laser cavity.

43. (Previously Presented) The system of claim 1, wherein the optical router comprises a plurality of upstream/downstream wavelength division multiplexers (WDMs) configured to route different data modulated pumping light to different optically pumped sources and to route different data modulated transmission light to a multiplexing element.

44. (Previously Presented) The system of claim 43, wherein the injection light is split into injection light having different wavelengths, and wherein the plurality of WDMs are further configured to route the injection light having different wavelengths to different optically pumped sources.